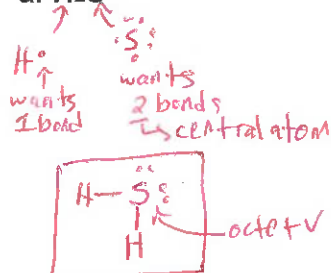
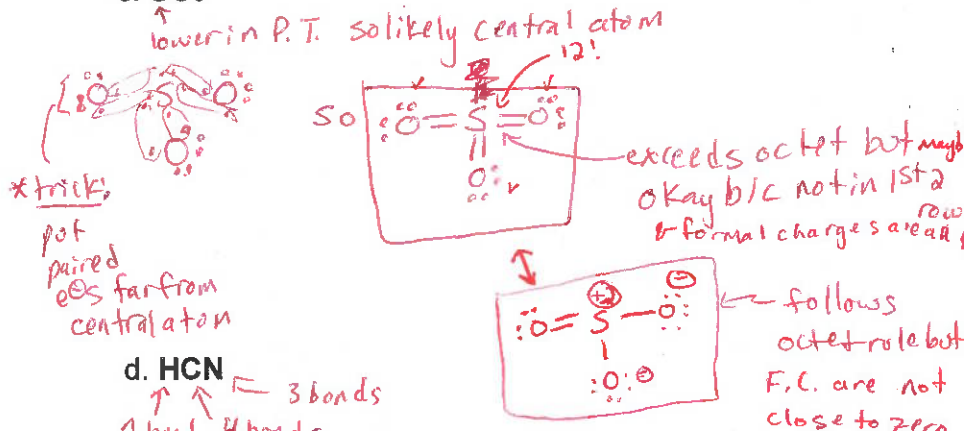
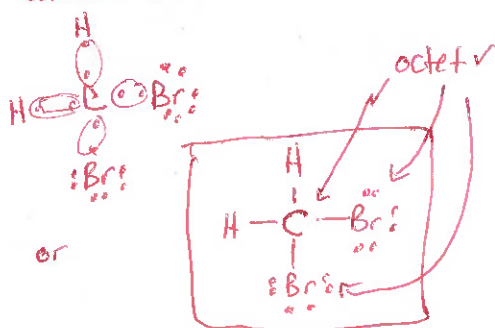
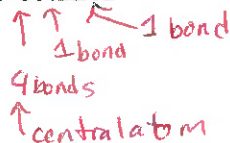
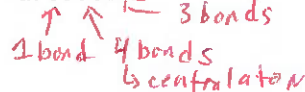


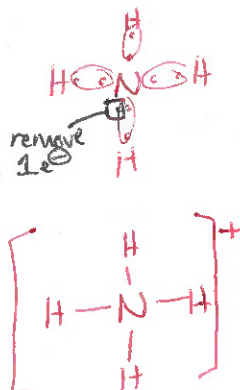
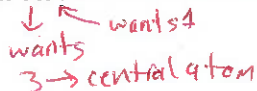
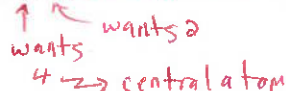
Practice Drawing Lewis Dot Structures

For more practice, see: <https://www.chem.purdue.edu/vsepr/practice.html>

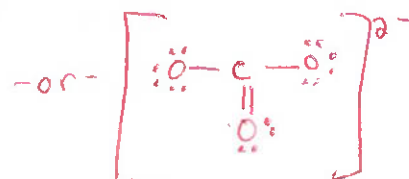
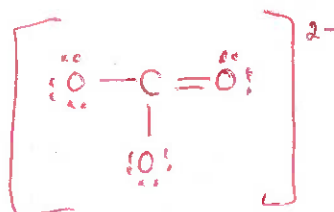
1) Draw the Lewis dot structures for each of the following molecules:

a. H_2S c. SO_3 b. CH_2Br_2 d. HCN 

2) Draw the Lewis dot structure for each of the following polyatomic ions:

a. NH_4^+ — remove $1e^-$ b. CO_3^{2-} — add $2e^-$ 

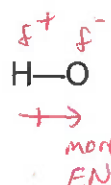
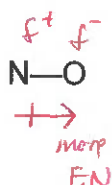
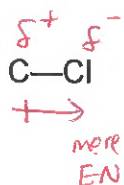
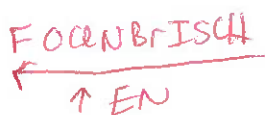
- or -



*Trick: make 1 single bond to all non-central atoms 1st then try to pair remaining

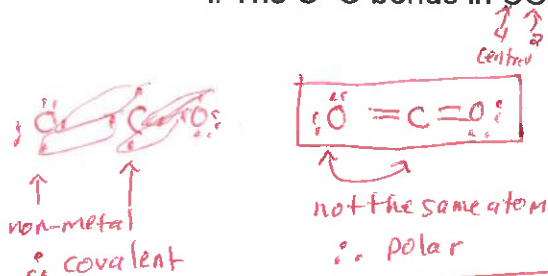
*next class how to discern & describe *

3) For each of the bonds below: i. Use delta notation (partial negative and partial positive) to indicate which atom is more electronegative, and ii. Use a dipole arrow to point from the less electronegative atom to the more electronegative atom.



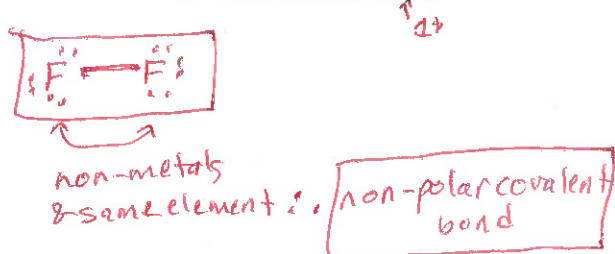
4) a) Draw the Lewis dot structure and b) Identify the type of bond described for each of the following as ionic, polar covalent, nonpolar covalent, or metallic.

i. The C-O bonds in CO_2

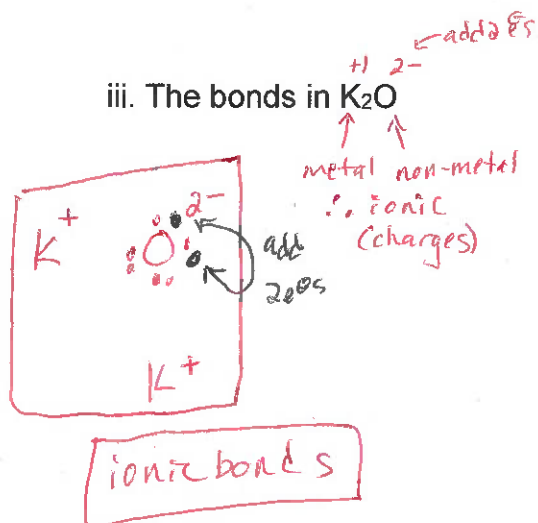


C-O is polar covalent bond

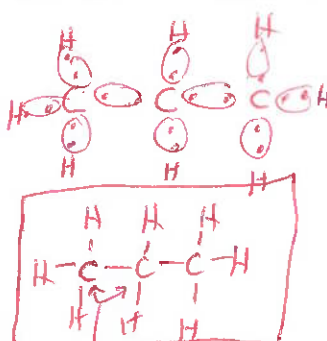
ii. The bonds in F_2



iii. The bonds in K_2O



iv. The C-C bonds in C_3H_8

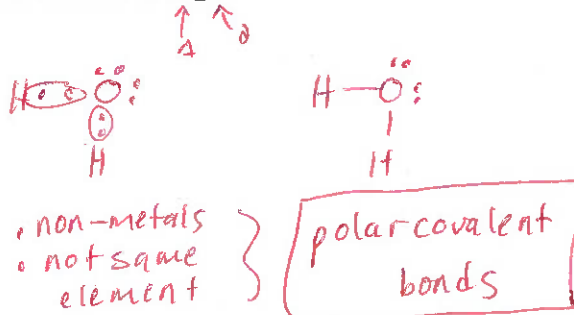


* Trick: since it wants only 1 bond, start with connecting other atoms 1st then put H's on

v. The bonds in Ba



vi. The bonds in H_2O



5) Rank the following in terms of increasing bond polarity: C-F, N-Cl, H-Br, O-H.

FOCENBRISCH
← ↑ EN

$N-Cl < H-Br < O-H < C-F$

6) Which of the following is the least electronegative element?

a. N

b. Cl

c. Mg

d. H

metal

7) Indicate which atom/ion has the highest value of electronegativity

^{37}Rb

or

^{53}I

or

^{35}Br